

Job: _____
Engineer: _____
Contractor: _____
Prepared By: _____
Model: _____ Indoor Date: _____

Raytherm® - Type WH

Water Heaters
Commercial

Models 2100 - 4001

EFFICIENT

- ▶ 82% thermal efficiency – highest of any atmospheric water heater available today

THERMAL SHOCK PROOF

- ▶ Twenty-year warranty against thermal shock damage up to 150°F differential
- ▶ Maximum outlet temperature: 210°F

LIGHTWEIGHT

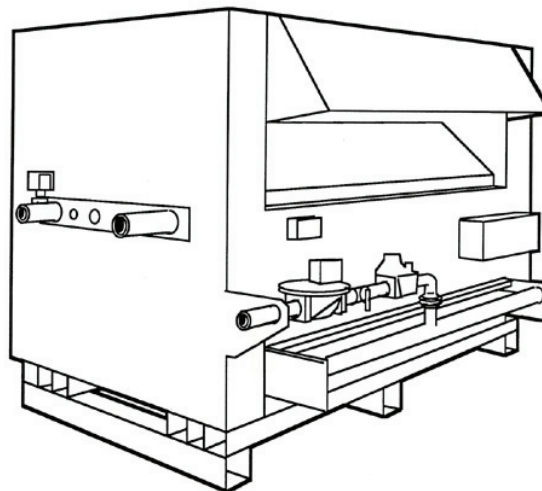
- ▶ A floor load of 70 lbs./sq. ft. or less

HIGH RECOVERY

- ▶ Cuts fuel costs substantially because the standby and radiation losses associated with tank-type water heaters are eliminated

LOW WATER OPERATING TEMPERATURE

- ▶ Operates with water temperature as low as 105°F without condensing



Proudly Made in the USA

Heat Exchanger

- ASME Inspected and Stamped 160 PSIG
- National Board Approved
- Headers
 - ☐ Bronze – Standard
 - ☐ Glass-lined Cast Iron – Option A-2
- Fin Tubing
 - ☐ Copper – Standard
 - ☐ Cupro Nickel – Option A-3
- ASME Steel Tube Sheet
- Silicone O-Rings
- 125 PSIG ASME Pressure Relief Valve
- Temperature and Pressure Gauge
- Water Connections
 - ☐ Left Hand – Standard
 - ☐ Right Hand – Option A-6
- Two-pass Flow Configuration

Controls

- 120V, 60Hz, 1 Ph Power Supply
- 120/24V Transformer
- 100% Pilot Shut-off/Lockout
- Electronic, Intermittent Ignition (IID) Pilot
- High Limit Control, Manual Reset – 200°F
- High Limit Control, Auto Reset – 200°F Models 3001-4001
- On/Off Switch
- Flow Switch
- Economaster II Pump Time Delay

Gas Control Train

- Manual Main Gas Shut-off Valve
- Main Gas Pressure Regulator
- Redundant Safety Shut-off Valve
- Control Valve
- Firing Mode
 - ☐ On/Off (WH1)
 - ☐ 2-stage Firing (WH3)
 - ☐ Motorized Modulation (WH2)
- Fuel
 - ☐ Natural Gas
 - ☐ Propane Gas
- Design Certified ANSI Z21.10.3

Construction

- Front Controls
- Stainless Steel Burners
- Baked Enamel Paint
- Built-in Draft Diverter
- Draft Inducer – Optional
 - ☐ Motorized Draft Inducer – Indoor – Option D-2
- CSA Certified – AB 1953 & VLA 193 Low Lead Compliant

Water Heater Controller

- Required on Model WH2 only
- ☐ B-40 TempTracker MOD Modulating Controller Mounted By Others

Temperature Controllers

- ☐ B-2 Single-Stage Tankstat (100-180°F), Loose
- ☐ B-3 2-Stage Tankstat (100-180°F), Loose
- ☐ Y-241 Electronic Sequencer, 1-4 Stages
- ☐ Y-281 Electronic Sequencer, 1-8 Stages

Additional Safety Controls

- ☐ F-9 Low Water Cut-off Probe
- ☐ I-3 High Limit Control, Auto Reset, 180°F
- ☐ S-1 Low Gas Pressure Switch, Manual
- ☐ S-2 High Gas Pressure Switch, Manual
- ☐ _____
- ☐ _____

Regulatory Agency Requirements

- ☐ CSD-1 Safety Controls
- ☐ _____



® LLC

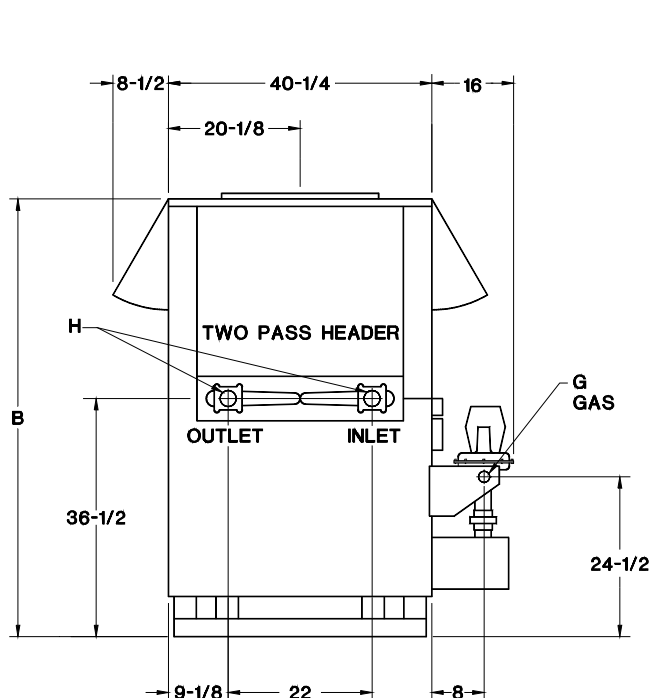
Raypak®

A Rheem® Company

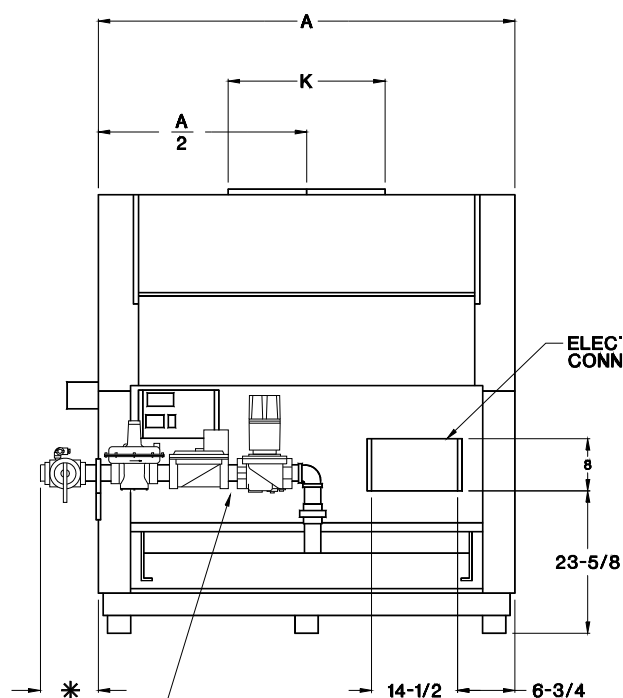
Raytherm - Type WH

Models 2100-4100

Model _____



* DIMENSION VARIES FOR EACH MODEL SIZE AND TYPE.
CONSULT FACTORY FOR DETAILS.



GAS TRAIN ILLUSTRATED FOR REFERENCE ONLY.
ACTUAL BOILER GAS CONTROLS MAY VARY FOR
EACH MODEL, SIZE AND TYPE. CONSULT FACTORY
FOR DETAILS

MODELS WH 2100 – 4001

| Model No. | MBTUH | | Width A | Overall Height B | Gas Conn. G | Water Conn. H | Flue Dia. K | Approx. Shipping Weight (lbs) |
|-----------|-------|--------|------------|---------------------|----------------|------------------|----------------|-------------------------------|
| | Input | Output | | | | | | |
| WH-2100 | 2100 | 1722 | 61 | 68-1/4 | * | 3 | 24 | 1400 |
| WH-2500 | 2499 | 2049 | 70 | 68-1/4 | * | 3 | 26 | 1580 |
| WH-3001 | 3000 | 2460 | 81-1/4 | 68-1/4 | 2 | 3 | 28 | 1750 |
| WH-3500 | 3500 | 2870 | 92-1/2 | 68-1/4 | 2 | 3 | 30 | 1920 |
| WH-4001 | 4000 | 3280 | 103-3/4 | 68-1/4 | 2 | 3 | 32 | 2100 |

* 1-1/2" or 2", contingent on water heater type code requirements

NOTES: Dimensions are in inches.

Ratings are for elevations up to 2,000 feet. For elevations over 2,000 feet, reduce ratings 4% for every 1,000 feet above sea level.

| Models | Electrical Rating | |
|-----------|----------------------------------|------------------|
| | W/Pump | W/O Pump |
| 2100-4001 | 951276 pump* 11 Amps @ 230VAC | < 8 Amp @ 120VAC |
| | 22 Amps @ 110VAC | |

* Pump requires separate power supply

HEATER RATES OF FLOW AND PRESSURE DROPS

| Model No. | 20°F ΔT | | 30°F ΔT | | 40°F ΔT | |
|-----------|---------|---------|---------|---------|---------|---------|
| | GPM | ΔP (ft) | GPM | ΔP (ft) | GPM | ΔP (ft) |
| WH-2100 | 172 | 11.0 | 115 | 4.9 | N/A | N/A |
| WH-2500 | N/A | N/A | 137 | 7.5 | 102 | 4.3 |
| WH-3001 | N/A | N/A | 164 | 11.2 | 123 | 6.5 |
| WH-3500 | N/A | N/A | 191 | 16.8 | 144 | 9.3 |
| WH-4001 | N/A | N/A | N/A | N/A | 164 | 12.8 |

Maximum acceptable flow through heat exchanger tubes is 200 GPM.

HEATER RECOVERY RATES (GPH)

| Model No. | Temperature Rise | | | | | | |
|-----------|------------------|-------|------|------|------|------|-------|
| | 20°F | 30°F | 40°F | 50°F | 60°F | 80°F | 100°F |
| WH-2100 | 10336 | 6890 | 5168 | 4134 | 3445 | 2584 | 2067 |
| WH-2500 | 12300 | 8200 | 6150 | 4920 | 4100 | 3075 | 2460 |
| WH-3001 | 14765 | 9844 | 7383 | 5906 | 4922 | 3691 | 2953 |
| WH-3500 | 17227 | 11484 | 8613 | 6891 | 5742 | 4301 | 3445 |
| WH-4001 | 19688 | 13125 | 9844 | 7875 | 6563 | 4922 | 3938 |